Gulf of Mexico Harmful Algal Bloom Bulletin

15 November 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: November 8, 2007

Conditions Report

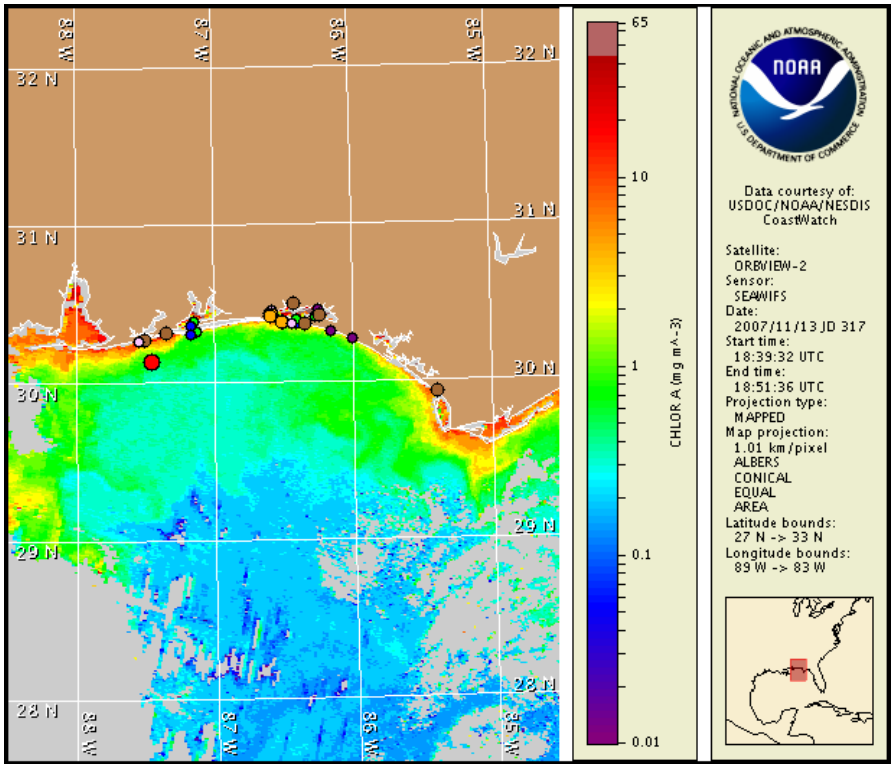
A harmful algal bloom has been identified in patches from Gulf County, Florida to Baldwin County, Alabama. In bay regions of Gulf County, patchy high impacts are possible today through Sunday. In bay regions of Okaloosa County, Florida and Baldwin County, Alabama patchy moderate impacts are possible today through Sunday. Patchy very low impacts are possible Friday and Sunday in coastal Okaloosa County. In Escambia, Walton, eastern Bay, and northern Gulf counties, Florida, patchy low impacts are possible today and Saturday and patchy very low impacts are possible Friday and Sunday. In Santa Rosa County, patchy very low impacts are possible today and Saturday and no impacts are expected on Friday and Sunday.

Analysis

A harmful algal bloom persists in patches from Gulf County to Escambia County, Florida and in Baldwin County, Alabama. Recent samples from Walton County, Florida indicate 'very low a' to 'low a' concentrations of *Karenia brevis* (FWRI, 11/9). A sample from Bay County (near the Bay/Gulf County border) indicates 'low a' concentrations of *K. brevis* (FWRI, 11/9). Satellite imagery (11/13) reveals patches of elevated chlorophyll levels (>3μg/L) from Baldwin County, Alabama to the eastern border of Escambia County. An elevated patch of chlorophyll (approximately 6 μg/L) is centered at 30°22'21''N, 86°31'33''W onshore Okaloosa County and an elevated patch of chlorophyll (approximately 7 μg/L) is centered at 30°10'38''N, 85°49'36''W onshore Bay County. From eastern Bay County to Gulf County, chlorophyll levels remain elevated (3-15 μg/L). Numerous reports of dead fish have been received from Walton and Okaloosa counties over the past few days. Respiratory irritation has also been reported in Gulf County.

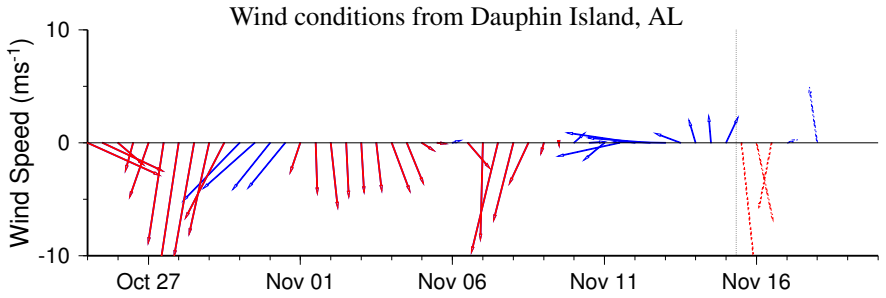
Onshore winds will increase the potential for impacts today and Saturday. Intensification of the bloom is unlikely.

Urizar, Fisher



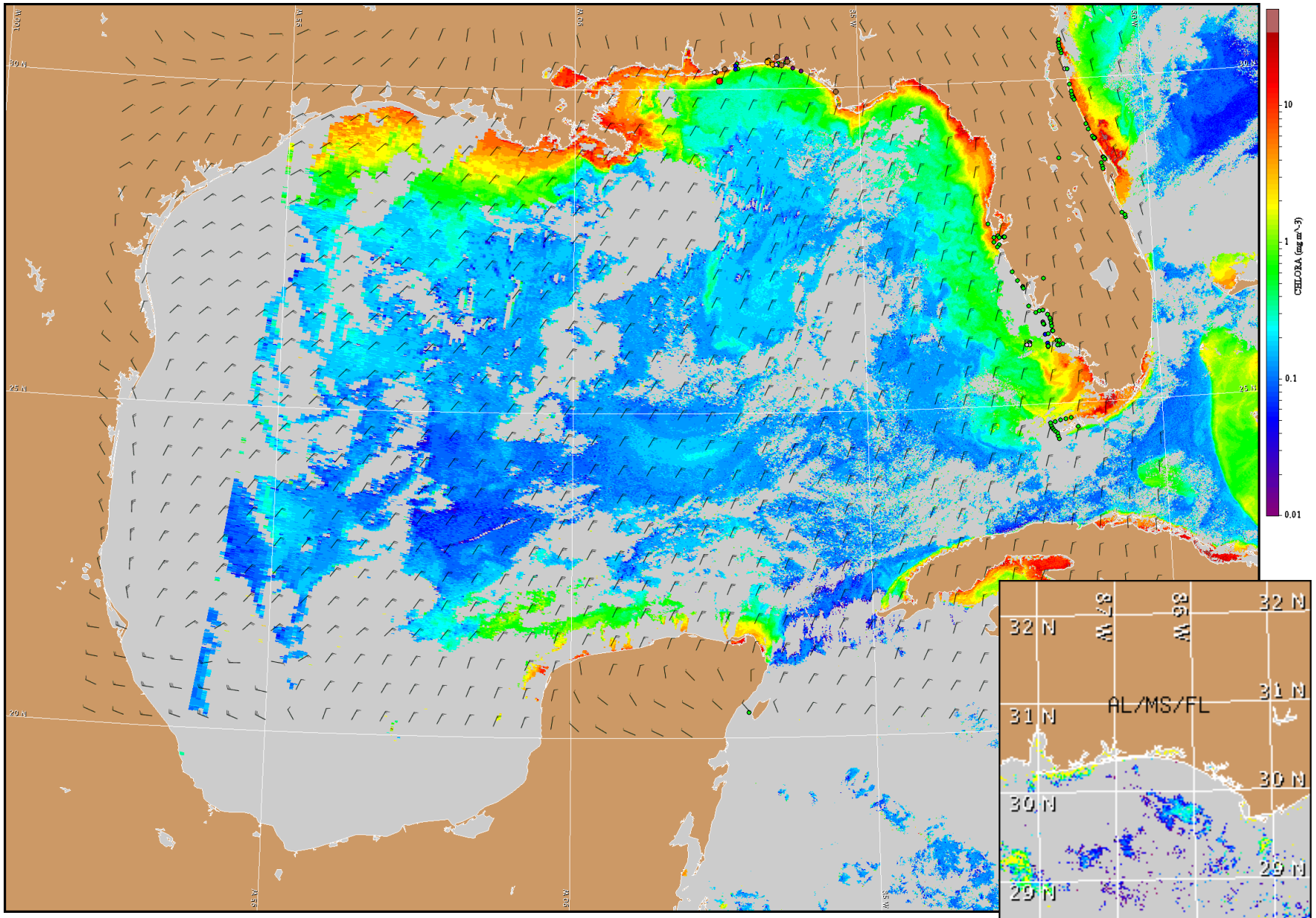
Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from November 5 to 14 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf

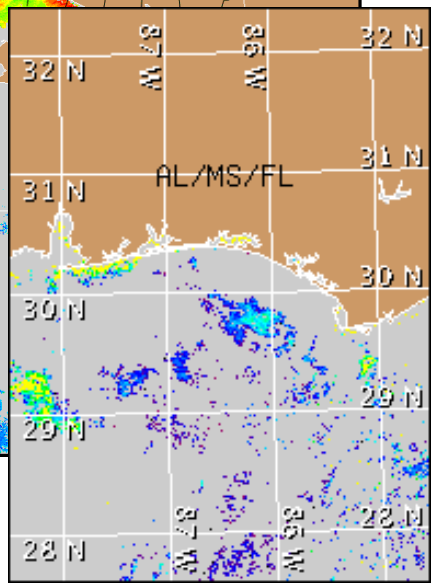


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

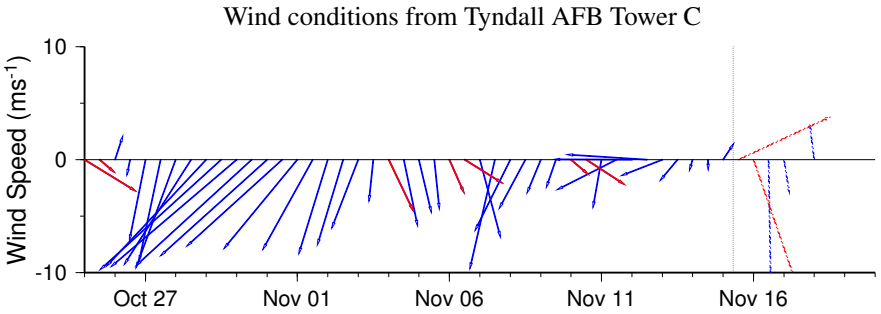
NW Florida: Southwesterlies today (10-15 kt, 5-8 m/s). Northerlies tonight through Friday (15-20 kt, 8-10 m/s). Northeasterlies Friday night (5-10 kt, 3-5 m/s). Southeasterlies Saturday (5-10 kt). Northeasterlies Sunday (5-10 kt).



Satellite chlorophyll image and forecast winds for November 16, 2007 12Z with Cell concentration sampling data from November 5 to 14 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf



Verifi ed and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).


Wind conditions from Tyndall AFB Tower C
Wind Speed (ms-1)
10
0
-10
Oct 27
Nov 01
Nov 06
Nov 11
Nov 16